

**AMENDMENT AND P<sup>3</sup>ITION  
FOR EXTENSION OF TIME  
Patent Application Serial No. 09/602,483**

**Attorney <sup>3</sup>cket No.: Case 6096  
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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) An integrated air foil and ammonia injection grid for a selective catalytic reduction (SCR) system, comprising :

a plurality of air foils arranged side-by-side and substantially parallel to one another in a flue, each air foil having a leading round edge and a trailing tapered edge with respect to a flow of flue gas across the air foils;

a plurality of injection tubes positioned one behind the other in each air foil at  
~~least one injection tube associated with each air foil~~, each injection tube provided with at least one nozzle for injecting ammonia into the flue gas flowing across the air foils; and means for supplying ammonia to each injection tube.

2. (cancelled)

3. (currently amended) The integrated air foil and ammonia injection grid according to claim 1 2, wherein each injection tube in a given air foil has a length different than a length of the other injection tubes in the same air foil.

4. (currently amended) The integrated air foil and ammonia injection grid according to claim 1 2, wherein a longest injection tube in a given air foil is located furthest downstream and proximate the tapered trailing edge and a shortest injection tube in the same air foil is located furthest upstream, remaining injection tubes in the same air foil being progressively shorter the further upstream any injection tube is located.

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5. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein each injection tube is proximate the trailing tapered edge of the air foil.

6. (original) The integrated air foil and ammonia injection grid according to claim 1, comprising a plurality of apertures on opposed lateral sides of the air foils for introducing a gas flow into the flue gas passing across the air foils.

7. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein each injection tube is provided with a plurality of nozzles.

8. (currently amended) The integrated air foil and ammonia injection grid according to claim 1, wherein each injection tube is provided with a plurality of nozzles.

9. (original) The integrated air foil and ammonia injection grid according to claim 8, wherein the nozzles of each injection tube are offset from the nozzles of the other injection tubes located in the same air foil.

10. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein each injection tube comprises at least one tee extension pipe extending from the injection tube, the tee extension pipe supporting the at least one nozzle.

11. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein the plurality of air foils extends substantially vertically within the flue.

12. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein the plurality of air foils extends substantially horizontally within the flue.

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13. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein an internal volume of each air foil is segmented to provide a plenum and the means for supplying ammonia to each injection tube provides the ammonia into the plenum for distribution of ammonia to the injection tubes and nozzles associated with each air foil.

14. (original) The integrated air foil and ammonia injection grid according to claim 1, wherein each air foil is provided with at least one aperture and the at least one nozzle is positioned so as to deliver the ammonia through the at least one aperture into the flue gas flow.

15. (original) An integrated air foil and ammonia injection grid for a selective catalytic reduction (SCR) system, comprising:

a plurality of air foils arranged side-by-side and substantially parallel to one another in a flue, each air foil having a leading round edge and a trailing tapered edge with respect to a flow of flue gas across the air foils;

a plurality of injection tubes positioned inside each air foil, the injection tubes having different lengths and positioned one behind the other with the longest injection tube located closer to the tapered trailing edge, the remaining injection tubes being progressively shorter the further upstream the injection tube is located, each injection tube being provided with at least one nozzle for injecting ammonia into the flue gas flowing across the air foils; and

means for supplying ammonia to each injection tube.

16. (original) An integrated air foil and ammonia injection grid for a selective catalytic reduction (SCR) system, comprising:

a plurality of air foils arranged side-by-side and substantially parallel to one another in a flue, each air foil having a leading round edge and a trailing tapered edge with respect to a flow of flue gas across the air foils;

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a plurality of injection tubes positioned inside each air foil, the injection tubes having different lengths and positioned one behind the other with the longest injection tube located closer to the tapered trailing edge, the remaining injection tubes being progressively shorter the further upstream the injection tube is located, each injection tube being provided with at least one tee extension pipe extending from the injection tube, the tee extension pipe supporting at least one nozzle for injecting ammonia into the flue gas flowing across the air foils; and

means for supplying ammonia to each injection tube.

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